

AMENDMENTS TO THE CLAIMS:

Please Cancel Claims 18, 41, 61 and 62. Please Enter new claims 63-76 in accordance with the Claims listing below. This listing of claims will replace all prior versions, and listings, of claims in the application.

These amendments and new claims introduce no new matter and support for the amendment and new claims is replete throughout the specification and claims as originally filed. These amendments are made without prejudice and are not to be construed as abandonment of previously claimed subject matter, or agreement with any objection or rejection of record.

LISTING OF CLAIMS:

1-62 (Cancelled).

63 (NEW). A method of using a model of a nuclear hormone receptor, or ligand binding domain thereof, bound to a nuclear hormone receptor ligand, the method comprising:
providing structural information corresponding to an atomic coordinate model of the nuclear hormone receptor, or ligand binding domain thereof, bound to the nuclear hormone receptor ligand; and,
accessing the structural information.

64 (NEW). A method of determining whether a potential nuclear ligand is likely to bind to a nuclear hormone receptor ligand binding domain, the method comprising:
accessing structural information corresponding to an atomic coordinate model of the nuclear hormone receptor ligand binding domain;
accessing structural information corresponding to the ligand; and,
modeling binding of the potential ligand to the nuclear hormone receptor ligand binding domain, thereby determining whether the potential ligand is likely to bind to the nuclear receptor ligand binding domain.

65 (NEW). The method of claim **64**, wherein modeling binding of the potential ligand comprises modeling whether the ligand binding domain folds around the potential ligand to form a buried ligand binding cavity.

66 (NEW). The method of claim **63** or **64**, wherein, in the atomic coordinate model, the nuclear receptor folds around the ligand or potential ligand to form a buried ligand binding cavity.

67 (NEW). The method of claim **63** or **64**, wherein the atomic coordinate model of the nuclear hormone receptor ligand binding domain comprises structural information for a bound ligand.

68 (NEW). The method of claim **63** or **64**, wherein the structural information comprises information corresponding to data from Appendix 3, 4, 5, 6, 7 or 8.

69 (NEW). The method of claim **63** or **64**, wherein accessing the structural information comprises performing a Fourier transform of crystallographic data corresponding to the nuclear receptor, the nuclear receptor ligand binding domain, or the nuclear receptor bound to the ligand at the nuclear receptor ligand binding domain.

70 (NEW). The method of claim **63** or **64**, comprising modeling which amino acid or amino acids of the nuclear receptor or nuclear receptor ligand binding domain interact with at least a first chemical moiety of the ligand.

71 (NEW). The method of claim **70**, further comprising designing a modified ligand, which modified ligand is selected to increase or decrease a modeled interaction between the amino acid or amino acids and the first chemical moiety.

72 (NEW). The method of claim **63** or **64**, comprising crystalizing the nuclear hormone receptor bound to the nuclear receptor ligand, wherein the structural information is derived from a crystal structure of the resulting crystal.

73 (NEW). The method of claim **63** or **64**, wherein the ligand is a computationally designed ligand.

74 (NEW). The method of claim **63** or **64**, wherein the ligand is a compound of formula I.

75 (NEW). The method of claim **63** or **64**, wherein the nuclear hormone receptor is a TR receptor.